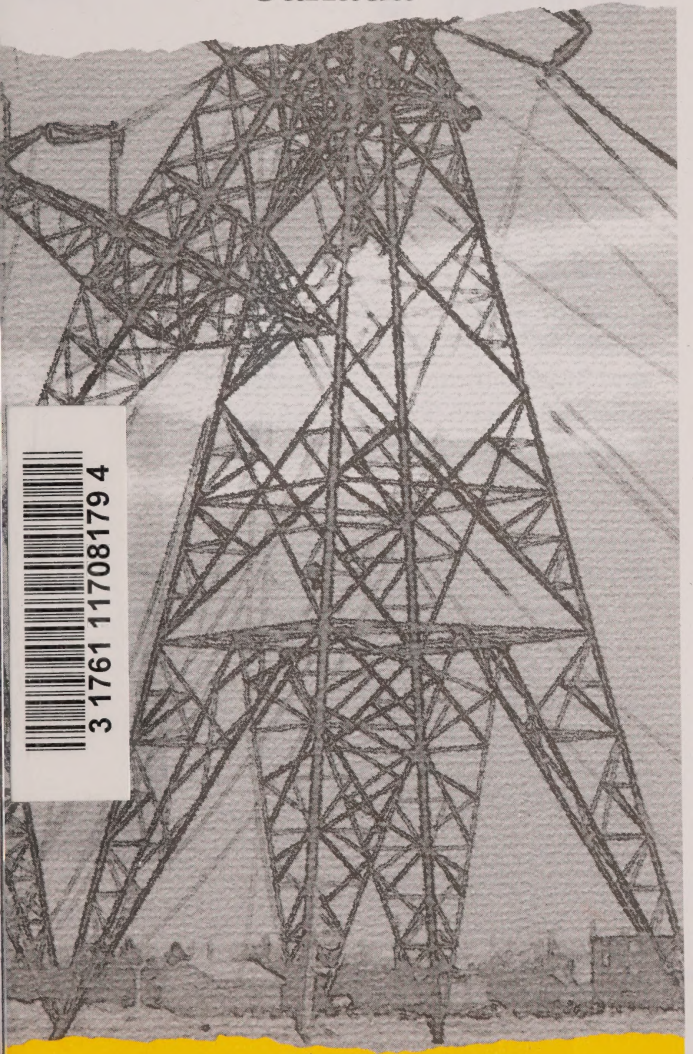
Emergency Preparedness Canada
Protection civile Canada

Self-Help Advice

WINTER POWER FAILURES

Canada



SAFE GUARD

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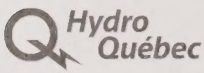

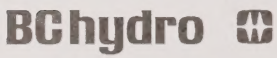

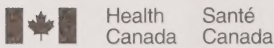

An electronic version is accessible on the Internet.

It is also available in alternate formats (audiocassette, large print, computer diskette and Braille) through InfoTouch by calling toll-free 1-800-788-8282. Use the same number for teletypewriter (TTY).

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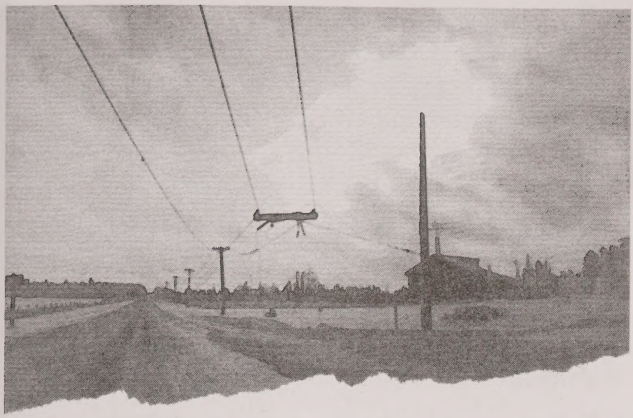


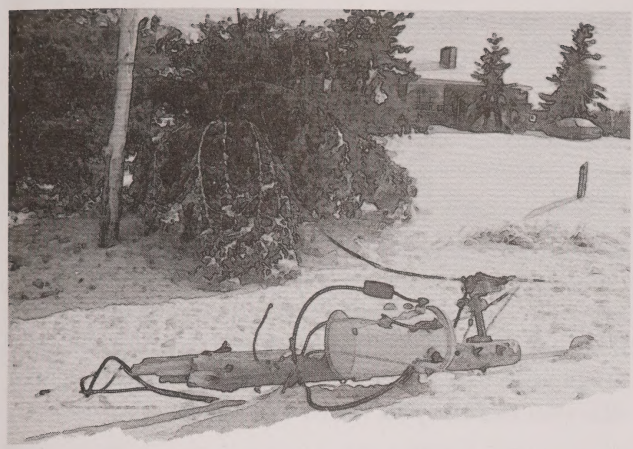
Most Canadian home-heating systems are dependent upon electric power. Power supply interruptions can last from a few hours to several days and are often caused by freezing rain, sleet storms and/or high winds which damage power lines and equipment. An extended power failure during winter months and subsequent loss of heating can result in cold, damp homes, severe living conditions and damage to walls, floors and plumbing.

Following these simple suggestions can reduce the harmful effects of power and heating failure in sub-zero weather.

PRECAUTIONS TO TAKE

- You can install a non-electric standby stove or heater. Choose heating units that are not dependent on an electric motor, electric fan, or some other electrical device to function. It is also important to adequately vent the stove or heater with the type of chimney flue specified for it. Never connect two heating units to the same chimney flue at the same time. If it is necessary to vent the standby heater to the existing chimney flue used by the furnace, first disconnect the furnace from it. Use only fuel-burning heaters certified by the Canadian Standards Association or Canadian Gas Association.

- If you have a wood-burning fireplace, clean the flue every fall in preparation for its use for home heating (i.e. sustained use at high temperatures). The creosote in a flue can be ignited by sustained high temperatures, and develop into a chimney fire.
- If you have a fireplace, keep a good supply of fuel on hand.
- If the standby heating unit will use the normal house oil or gas supply, have it connected with shut-off valves by a competent technician.
- Before considering the use of an emergency generator during a power failure, check with furnace, appliance and lighting fixture dealers or manufacturers regarding power requirements and proper operating procedures.
- If someone in the home relies on electrically powered life-sustaining equipment, register with your electric supply authority and your community emergency program.
- Keep an emergency survival kit — containing provisions for at least three days — stored in a handy place. The kit should include:
  - Non-perishable food and water
  - Emergency lighting such as flashlights with spare batteries, candles, matches/lighter, or coal-oil lanterns and fuel
  - Fuel stove and fuel (follow manufacturer's instructions)
  - Blankets and warm clothing
  - A battery-powered radio and spare batteries
- You should also prepare a portable Emergency Survival Kit in the event that you have to evacuate your home.



IF THERE IS A POWER FAILURE

Check whether the power failure is limited to your home. If your neighbours' power is still on, check your own circuit breaker panel or fuse box. If the problem is not a breaker or a fuse, check the service wires leading to the house. If they are obviously damaged or on the ground, stay well back and notify your electric supply authority (keep the number along with other emergency numbers near your telephone).

If your neighbours' power is also out, notify your electric supply authority.

Turn off all tools, appliances and electronic equipment, and turn the thermostat(s) for the home heating system down to minimum, for the following reasons:

- tools and appliances left on will start up automatically upon restoration of service; turning them off will prevent injury, damage or fire.
- if a power surge follows start up, it could damage sensitive electronic equipment such as computers, microwaves and VCRs (protecting these appliances with a power surge proof powerbar is a smart and inexpensive precaution).
- power can be restored more easily when there is not a heavy load on the electric system.

Leave one light switch on so you know when power is restored.

Don't open your freezer or fridge unless it is absolutely necessary. A full freezer will keep food frozen for 24 to 36 hours if the door remains closed.

Don't use charcoal or gas barbecues, camping heating equipment, or home generators indoors. They give off carbon monoxide. Because you can't smell or see it, carbon monoxide can cause health problems and even kill you before you know it's there.

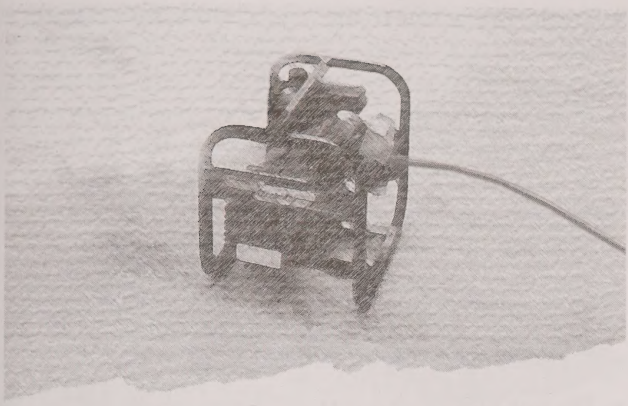
Use proper candleholders. Never leave lit candles unattended.

Use your battery-powered radio for local information.

Remember that even in very cold weather, a house with doors and windows closed will not become too cold for comfort for several hours.

If you have a backup heating unit, turn it on before the house gets too cold. If the unit must be vented to the same chimney flue as the furnace, switch the furnace off before disconnecting the furnace flue. (See advice earlier in the brochure on the installation of backup heating units).

Home generators are handy for backup electricity in case of an outage, but there are hazards to be aware of. **Serious accidents can result when a home generator is connected to an existing electrical circuit.** If the electricity produced by the home generator follows the electrical lines back to the transformer, and the current is transformed to a higher voltage, the lives of any utility employees working on the lines nearby are endangered. Anyone touching equipment powered by the generator is also in danger. Also, when the main electric power comes back on, a generator connected to the existing electrical circuit will result in an explosion and fire. **Direct installation of a generator to an existing electrical system should only be done by a qualified technician and approved by your electric supply authority.**



To operate a generator safely, follow these simple steps:

- Follow the manufacturer's instructions.
- Always ensure that the generator operates outdoors in well-ventilated conditions, well away from doors or windows to prevent exhaust gases from entering the house.
- Connect lights and appliances directly to the generator. If extension cords must be used, ensure they are properly rated, CSA approved cords.

IF YOU HAVE TO EVACUATE

A house can be damaged by low temperatures, but the major threat is to the plumbing system. If a standby heating system is used, check to see that no part of the plumbing system can freeze.

If the house must be evacuated, protect it by taking the following precautions:

- Turn off the main breaker or switch of the circuit breaker panel or power supply box.
- Turn off the water main where it enters the house. Protect the valve, inlet pipe, and meter or pump with blankets or insulation material.

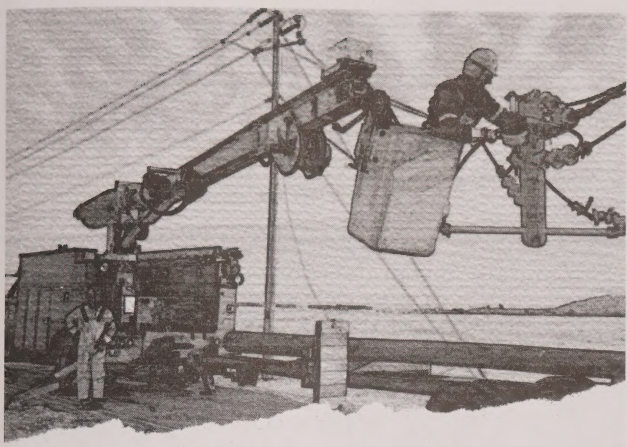
- Drain the water from your plumbing system. Starting at the top of the house, open all taps and flush toilets several times. Go to the basement and open the drain valve. Drain your hot water tank by attaching a hose to the tank drain valve and running it to the basement floor drain. **(If you drain a gas-fired water tank, the pilot light should be turned out — the local gas supplier should be called to re-light it!)**
- Unhook washing machine hoses and drain.
- Do not worry about small amounts of water trapped in horizontal pipes. Add a small amount of glycol or antifreeze to water left in the toilet bowl, and the sink and bathtub traps.
- If your house is protected from ground water by a sump pump, clear valuables from the basement floor in case of flooding.
- Listen to a battery-operated or car radio for more detailed local advice and instructions.

DOWNED POWER LINE

Call your electric supply authority with the exact location of the downed line. Keep back a minimum of 10 metres (33 feet) from wires or anything in contact with them, and warn others of the danger. Always assume that the lines are live. (It is difficult to distinguish between power lines and other utility lines, for example telephone or cable lines and they also carry sufficient power to cause harm: therefore, treat all lines as a danger.)

AFTER THE POWER RETURNS

- If the main electric switch was turned off, check to ensure appliances, electric heaters, TVs, microwave ovens, computers, etc. are unplugged to prevent damage from a power surge when the power is restored.



- Do not enter a flooded basement unless you are sure the power is disconnected.
- Do not use flooded appliances, electrical outlets, switch boxes or fuse-breaker panels until they have been checked and cleaned by a qualified technician.
- Replace the furnace flue (if removed) and turn off the fuel to the standby heating unit.
- Switch on the main electric switch.
- Give the electrical system a chance to stabilise before re-connecting tools and appliances. Turn the heating system thermostats up first, followed in a couple of minutes by re-connection of the fridge and freezer. Wait 10 to 15 minutes before re-connecting all other tools and appliances.
- Close the drain valve in the basement.
- Turn on the water supply. Close lowest valves/taps first and allow air to escape from upper taps.
- Make sure that the hot water heater is filled before turning on the power to it.
- Rinse out dishwasher and washing machine if necessary.

- Warm house slightly above normal temperature for a few hours to allow it to dry thoroughly.
- Check food supplies in refrigerators, freezers and cupboards for signs of spoilage. If a freezer door has been kept closed, food should stay frozen 24 to 36 hours depending on the temperature. When food begins to defrost (usually after two days) it should be cooked, otherwise it should be destroyed in accordance with the instruction from the local public health authorities.
- As a general precaution, keep a bag of ice cubes in the freezer. If you return home after a period of absence and the ice has melted and refrozen, there is a good chance that the food is spoiled.
- Restock your Emergency Survival Kit so the supplies will be there when needed again.

For additional information on electrical safety, electricity use or actions to take following a power outage, contact your electric supply authority.

For more information on emergency preparedness, please contact the emergency measures organization in your province or territory.

For additional information on reoccupying your house after a prolonged winter power outage, contact the

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Internet: http://www.cmhc-schl.gc.ca

For self-help advice on other emergency preparedness topics, contact:

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SAFE GUARD

Emergency Preparedness Partners in Canada

SAFE GUARD is a national information program based on partnerships and aimed at increasing public awareness of emergency preparedness in Canada.

The SAFE GUARD program brings together government, private organizations and voluntary agencies that are part of the emergency planning, response and recovery community.

The triangle depicted in the program logo is the international symbol of emergency preparedness. The jagged line evokes the maple leaf, Canada's internationally recognized symbol. The amber yellow colour represents caution and warning.

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